

ABSTRACT

[0046] An improved method for manufacturing a vaned diffuser (101) of a turbocharger, preferably from aluminum or an aluminum alloy, where the vaned diffuser possesses at least one axis (115) suitable for separating the vaned diffuser from its rigid mold by translation. Casting of a raw vaned diffuser (407) having an optional central hub (205) and, optionally, ribs on the hub (209), is disclosed in a plaster mold (305). The hub and optional ribs are machine finished from the raw vaned diffuser to yield the finished vaned diffuser (101). The method provides the high degree of dimensional accuracy, and high quality surface finish, required to produce a vaned diffuser of an efficient turbocharger.